

When numbers still work but words don't: what the dementia brain is actually doing



A moment that often confuses families is when a person living with dementia appears able to work with numbers accurately but can no longer say those numbers correctly. On the surface, this looks contradictory. If the brain is “failing,” how can calculations still be correct while language is not? This is where understanding the Launex Dementia Brain Map™ changes everything.

In the dementia brain, decline does not happen evenly. The brain is not switching off as a whole system; it is **disconnecting by networks**. On the Launex Dementia Brain Map™, this first shows up in the areas responsible for language, sequencing, and symbolic labelling — functions primarily managed by the thinking brain. Numbers spoken out loud are symbols. They require retrieval, ordering, verbal output, and monitoring for accuracy. These processes rely on networks that are fragile early in many dementias.

At the same time, calculation itself often sits in a different pathway. Long-practised numerical work becomes procedural, not linguistic. It is handled by deeply embedded pattern systems that sit lower in the brain hierarchy. This is why a person may misname a number but still perform the calculation correctly. The brain is bypassing damaged language circuits and relying on intact procedural memory.

This is where the **Three Brain connection** becomes visible. When the thinking brain can no longer reliably translate internal information into words, the brain does not stop functioning — it **hands control to the emotional and instinctive systems**. The gut and heart brains take over regulation. They are not concerned with verbal precision; they are concerned with safety, familiarity, and completion of a task that feels meaningful.

From the outside, the behaviour may look impressive or confusing. From inside the brain, it is a compensatory response. The emotional brain recognises the task as familiar and safe, so it keeps driving the behaviour forward even though the thinking brain can no longer narrate it correctly. This is not insight or stubbornness; it is neurological survival.

Understanding this changes how we respond. Correcting spoken numbers or drawing attention to verbal mistakes increases cognitive load on a system that is already failing. It pulls the person back into the thinking brain at a point where that brain cannot sustain control. This often leads

to frustration, agitation, or withdrawal — not because the person is aware of “getting it wrong,” but because the emotional brain senses rising threat.

When families learn to see this through the Launex Dementia Brain Map™, the behaviour stops being puzzling and starts making sense. The brain is showing us which pathways are still available and which are no longer reliable. The task is not to force the failing system back online, but to respect the route the brain is now using to stay regulated and engaged.

This is the difference between observing behaviour and **interpreting it neurologically**. Once that connection is made, families stop asking, “Why can he still do this?” and start asking, “Which part of the brain is carrying this now?” That shift is where understanding begins, when behaviour is the language spoken, and we are listening differently.